

Date: Thursday, 5/10/2007 2:36:02 PM
User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : CROSSTUBE EXTRUSION (407 AFT)
Job Number : 32308	
Estimate Number : 10031	
P.O. Number : <i>N/A</i>	Part Number : D6010115
This Issue : 5/10/2007 S.O. No. : <i>N/A</i>	Drawing Number : D6010 REV A
Prsht Rev. : NC	Project Number : N/A
First Issue : <i>N/A</i> Type : LANDING GEAR	Drawing Revision : A
Previous Run : 26424	Material : <i>N/A</i>
Written By : <i>[Signature]</i>	Due Date : 10/30/2007
Checked & Approved By : <i>[Signature]</i> 07.05.10	Qty: <i>22</i> Um: <i>15</i> Each
Comment : Est Rev: A 01.08.17 New Issue SM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: *3761*

C207105111 22

- a) Order as per Dwg D6010
- b) Material: 2.250" x 0.320 wall 7075-T6/T6511 (WW-T-700/7 or QQ-A-225/9 or QQ-A-200/11) seamless aluminum tube
- c) Minimum ultimate tensile strength = 77 ksi
- d) Minimum tensile yield strength = 66 ksi
- e) Tolerance are per ASTM B210 (see details on Dwg D6010)
- f) Material certification required

2.0	D6010115P	Crosstube Material
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 15.0000 Each(s)
Crosstube Material

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1
Receive & Inspect For Transit Damage
Ensure material certification is attached

C0711126 26

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK
Ensure Material certification comply to Dwg

SC 07.10.27

26

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: LD Date: 07/10/07
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: CROSSTUBE EXTRUSION (407 AFT)

Job Number: 32308

Part Number: D6010115

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

N/A

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: LNC

ml 07.10.27

(26)

7.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

(20)
07/10/27

Job Completion



07.10.27

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

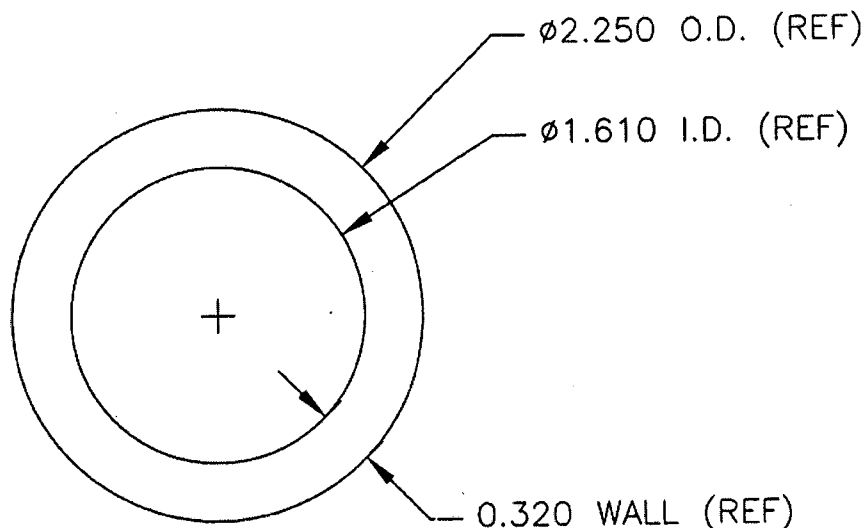
NOTE: Date & initial all entries



DESIGN #	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D6010	REV. A SHEET 1 OF 1
DATE 01.08.16		TITLE CROSSTUBE MATERIAL	SCALE 1:1
A	01.08.16	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
01.08.17 #



NOTES

- 1) D6010-XXX CROSSTUBE
LENGTH

WHERE XXX IS LENGTH IN INCHES
EG. 115" LONG TUBE: D6010-115

- 2) MATERIAL: 2.250 OD x 0.320 WALL 7075-T6/T6511 (WW-T-700/7 OR QQ-A-225/9 OR QQ-A-200/11) SEAMLESS ALUMINUM TUBE.
MINIMUM ULTIMATE TENSILE STRENGTH = 77 ksi
MINIMUM YIELD TENSILE STRENGTH = 66 ksi
- 3) TOLERANCES ARE PER ASTM B210 AS FOLLOWS:
O.D.: ± 0.006 MEAN (± 0.012 INCLUDING OVALITY)
WALL: ± 0.015 MEAN (± 0.032 INCLUDING ECCENTRICITY)
LENGTH: XXX $+0.125/-0.000$
STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH
- 4) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 5) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 32308

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ALUnna

Abnahmeprüfzeugnis 3.1 - EN 10204:2004

Inspection Certificate 3.1 - EN 10204:2004 / Certificat de Reception 3.1- EN 10204:2004

Kunde: Dart Aerospace Ltd.

Client:

1270 Aberdeen Street
K6A1K7 Hawkesbury, ON Canada

Zeugnisnummer: 1011/07

Cert No. / No. du certificat:

Bestellnummer: PO00003761

Order No. / No. de commande

Produkt: Rohre nahtlos gepresst und gezogen

Product / Produit: Tubes seamless extruded and draw Tubes file sur aiguille et etire **Reference/Notre Reference:**

Spezifikation: AMS - QQ - A - 200/11E; Spezifikation Dart Aerospace
Specification: D6010

Auftrag: 25006/3

Werks:off: EN AW-7075

Alloy/Alliage: 3.4365

Zustand: T 6511

Temper/Etat

Abmessung 2,250 INCH x 1,610 INCH x 0,320 INCH x 115,000 INCH

Size / Dimension D6010-115 2.250 x 0.320 x 115

Kennzeichnung ALUnna - Cert No. 1011/07 - 7075 - T 6511 - Cast No. 01706073 - AMS QQA 200/11E - 2.250" OD X 0.320" Wall -
Marking/ Marquage: Heat No. 947/09 - Lot 25006/3-1 PO. 00003761

Lieferung: Stück/pcs. kg/kgs
Delivered Material / Matériel délivre: 26 266,00

1. Chemische Analyse Chemical Analysis / analyse chimique

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Zr	Bi	Sn	Ni
Charge/ min.			1,2		2,1	0,18	5,1						
Cast No. max.	0,40	0,50	2,0	0,30	2,9	0,28	6,1	0,20					
01706073	0,12	0,28	1,48	0,04	2,5	0,18	5,95	0,03	0	0,01			

Elemente ohne Angabe < 0,01 % / Elements without indication < 0,01 %

2. Mechanische Eigenschaften Mechanical Properties / Valeurs Mécaniques

Anforderungen Specification	Rm N/mm ²	Rp0,2 N/mm ²	A5 %	A 50 %	HB	Heat No.
min:	531	455				
max:						
1	571	523	10,0	8,0		947/09 - 26 pcs.

RMS outside 25 - max. 22,5 µ"

**Ergebnis der
Prüfungen:**

Es wird bestätigt, daß die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellannahme entspricht

Test results:

We confirm that the delivery has been tested and applies to the agreements made on receipt of the order

Resultats:

Nous confirmons que la livraison a été controlée et correspond avec les conventions faites à la réception de la commande



Zertifiziert nach DIN EN ISO 9001:2000, gültig bis 2009-03-27
Zertifikat-Registrier-Nr.: 001050 OM

[Signature]

